ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of KTBS, LLC, licensee of digital full-power television station KPXJ-DT, Channel 21 in Minden, Louisiana, in support of its application for modification of License BLCDT-20050930AAL to correct the make and model of the installed antenna. No change in site location, antenna height or significant change in the antenna's azimuth pattern or orientation is proposed herein.

While an Andrew ATW20HS3-HSC3-21H antenna was originally authorized in BPCDT-20040518ABZ, a Dielectric TFU-30DSC-R S200 antenna with the same azimuth pattern was purchased and installed at the approved site and height. Attached are the engineering specifications for the in-place antenna. While there are slight differences between the authorized and installed antennas' azimuth patterns, they are insignificant, especially in the determination of the station's coverage contour.

Since a different antenna elevation pattern is specified herein, we have recalculated the power density situation in the vicinity of the KPXJ-DT transmitter site. Considering a main-lobe effective radiated power of 1000 kW, an antenna radiation center 488 meters above ground, and the specific elevation pattern for the in-place Dielectric antenna, maximum power density two meters above ground of 0.00057 mW/cm^2 is calculated to occur 334 meters southeast of the base of the tower. Since this is only 0.2 percent of the 0.34 mW/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 21 (512-518 MHz), this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive non-ionizing radiation.

I declare under penalty of perjury that the foregoing statements and the attached exhibits are true and correct to the best of my knowledge and belief.

KEVIN T. FISHER

July 2, 2015

Proposal Number	**DCA-10936**	Revision:	**2**
Date	**9-Jun-05**		
Call Letters	**KPXJ-DT**	Channel	**21**
Location	**Minden, LA**		
Customer			
Antenna Type	**TFU-30DSC-R S200**		

SYSTEM SUMMARY

Antenna:

			H Pol	
Type:	**TFU-30DSC-R S200**	ERP:	**1000 kW**	**(30.00 dBk)**
Channel:	**21**	Peak Gain*:	**51.0**	**(17.08 dB)**
Location:	**Minden, LA**	Input Power:	**19.6 kW**	**(12.92 dBk)**

Transmission Line:

Type:	**EIA/DCA**		Attenuation:	**2.47 dB**
Size:	**4-1/16 in**	**EHT**	Efficiency:	**56.6%**
Impedance:	**50 ohm**			
Length:	**1,615 ft**		**492.3 m**	

Transmitter:

Power Required: **34.6 kW** **(15.40 dBk)**

* Gain is with respect to half wave dipole.

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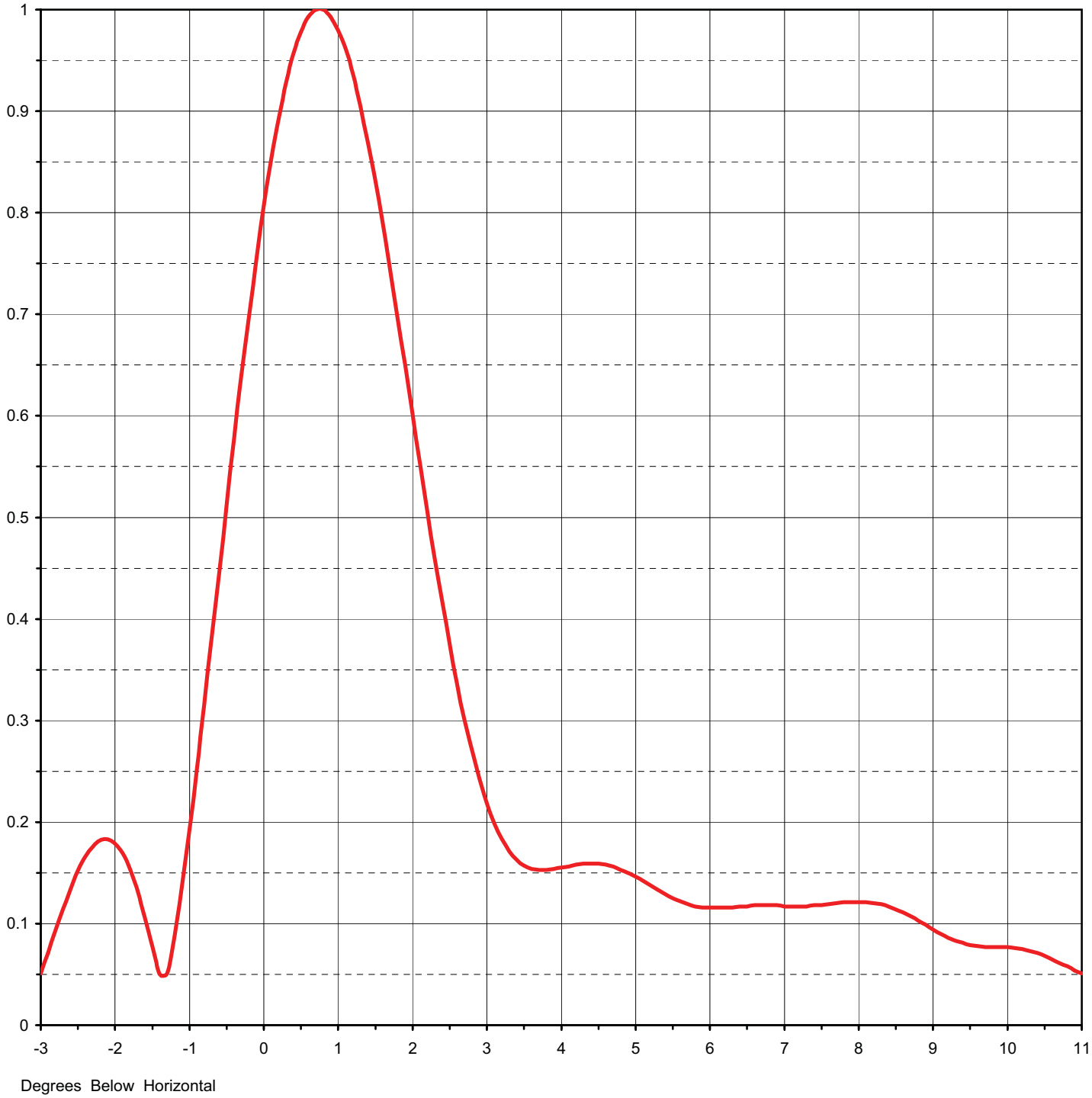
Date	**9-Jun-05**		
Call Letters	**KPXJ-DT**	Channel	**21**
Location	**Minden, LA**		
Customer			
Antenna Type	**TFU-30DSC-R S200**		

ELEVATION PATTERN

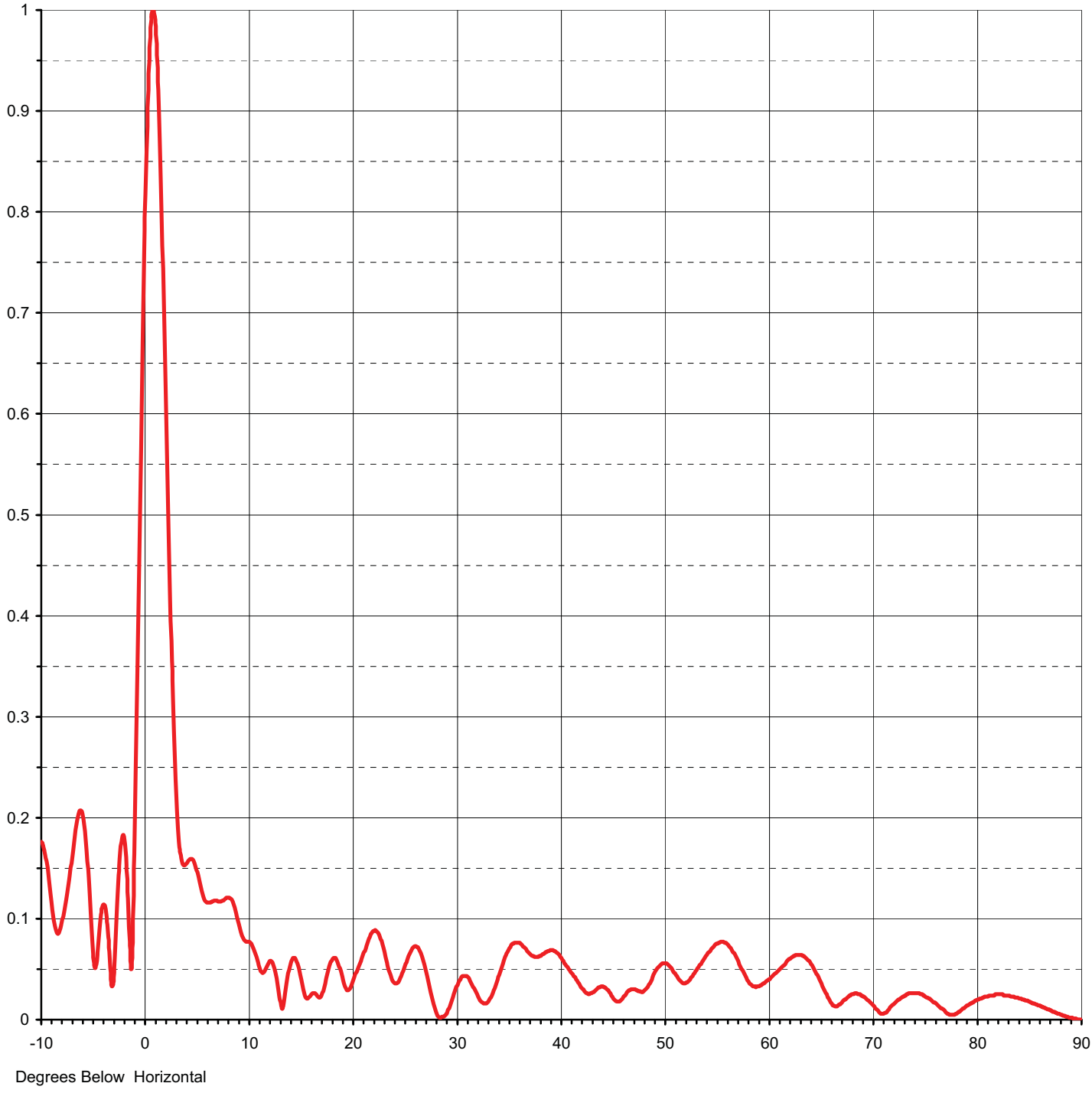
RMS Gain at Main Lobe	**25.50 (14.07 dB)**	Beam Tilt	**0.75 deg**
RMS Gain at Horizontal	**16.60 (12.20 dB)**	Frequency	**515.00 MHz**
Calculated / Measured	**Calculated**	Drawing #	**30Q255075**



Proposal Number	**DCA-10936**	Revision:	**2**
Date	**9-Jun-05**		
Call Letters	**KPXJ-DT**	Channel	**21**
Location	**Minden, LA**		
Customer			
Antenna Type	**TFU-30DSC-R S200**		

ELEVATION PATTERN

RMS Gain at Main Lobe	**25.50 (14.07 dB)**	Beam Tilt	**0.75 deg**
RMS Gain at Horizontal	**16.60 (12.20 dB)**	Frequency	**515.00 MHz**
Calculated / Measured	**Calculated**	Drawing #	**30Q255075-90**



Dielectric

Proposal Number	**DCA-10936**	Revision:	**2**
Date	**9-Jun-05**		
Call Letters	**KPXJ-DT**	Channel	**21**
Location	**Minden, LA**		
Customer			
Antenna Type	**TFU-30DSC-R S200**		

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **30Q255075-90**

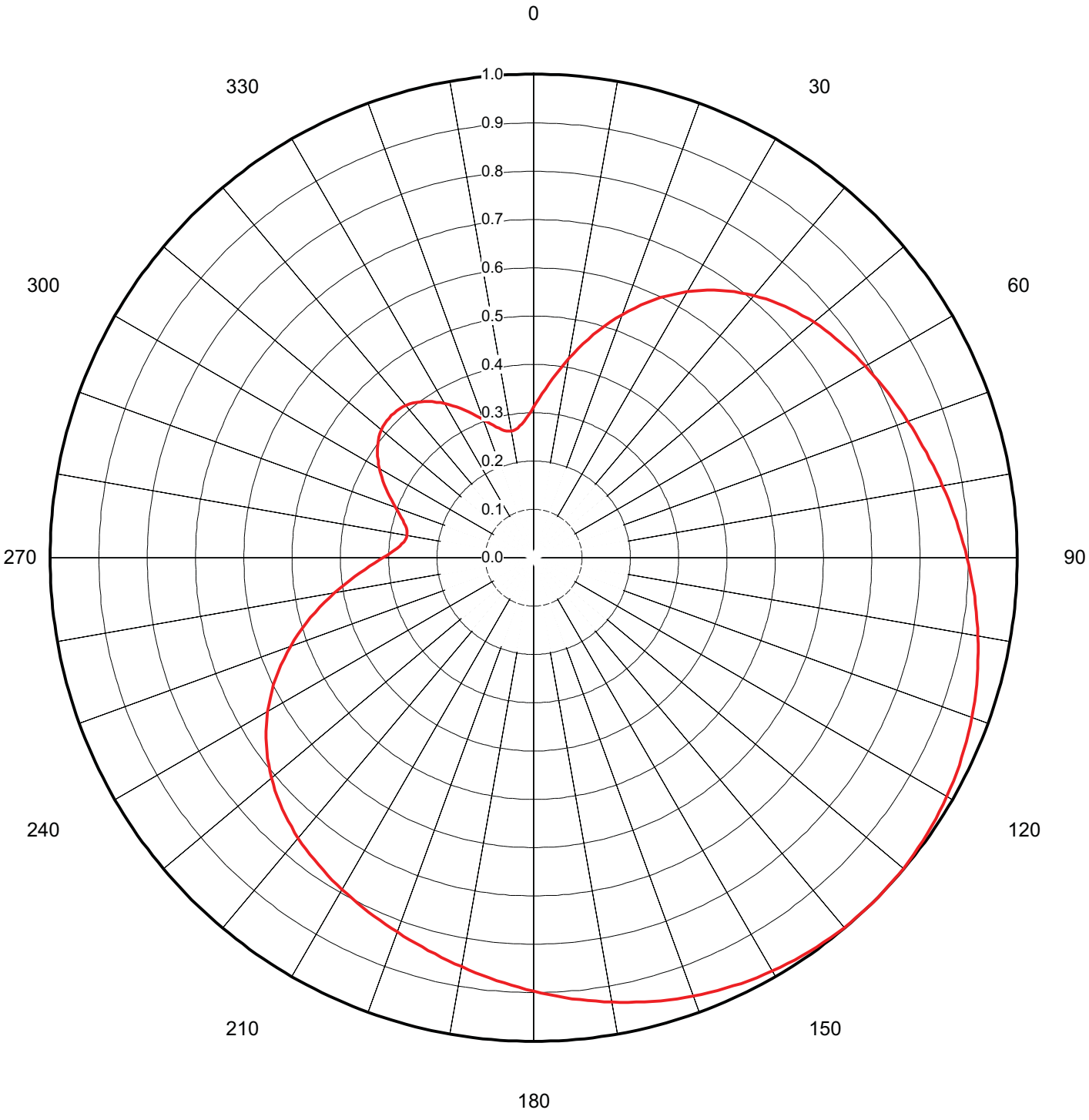
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.176	2.4	0.416	10.6	0.068	30.5	0.042	51.0	0.046	71.5	0.010
-9.5	0.157	2.6	0.336	10.8	0.061	31.0	0.043	51.5	0.039	72.0	0.016
-9.0	0.116	2.8	0.270	11.0	0.054	31.5	0.035	52.0	0.036	72.5	0.020
-8.5	0.086	3.0	0.219	11.5	0.047	32.0	0.025	52.5	0.040	73.0	0.024
-8.0	0.097	3.2	0.183	12.0	0.057	32.5	0.017	53.0	0.048	73.5	0.026
-7.5	0.125	3.4	0.163	12.5	0.051	33.0	0.017	53.5	0.055	74.0	0.026
-7.0	0.163	3.6	0.154	13.0	0.023	33.5	0.026	54.0	0.063	74.5	0.025
-6.5	0.200	3.8	0.153	13.5	0.023	34.0	0.040	54.5	0.070	75.0	0.023
-6.0	0.202	4.0	0.155	14.0	0.053	34.5	0.056	55.0	0.075	75.5	0.020
-5.5	0.149	4.2	0.158	14.5	0.061	35.0	0.069	55.5	0.077	76.0	0.016
-5.0	0.065	4.4	0.159	15.0	0.044	35.5	0.075	56.0	0.075	76.5	0.011
-4.5	0.078	4.6	0.158	15.5	0.023	36.0	0.076	56.5	0.069	77.0	0.007
-4.0	0.114	4.8	0.153	16.0	0.024	36.5	0.072	57.0	0.060	77.5	0.005
-3.5	0.075	5.0	0.146	16.5	0.025	37.0	0.066	57.5	0.049	78.0	0.006
-3.0	0.051	5.2	0.138	17.0	0.023	37.5	0.062	58.0	0.039	78.5	0.010
-2.8	0.093	5.4	0.129	17.5	0.041	38.0	0.063	58.5	0.033	79.0	0.014
-2.6	0.134	5.6	0.122	18.0	0.058	38.5	0.066	59.0	0.033	79.5	0.017
-2.4	0.166	5.8	0.117	18.5	0.059	39.0	0.069	59.5	0.036	80.0	0.020
-2.2	0.182	6.0	0.116	19.0	0.044	39.5	0.068	60.0	0.040	80.5	0.022
-2.0	0.179	6.2	0.116	19.5	0.029	40.0	0.062	60.5	0.044	81.0	0.023
-1.8	0.154	6.4	0.117	20.0	0.036	40.5	0.055	61.0	0.049	81.5	0.024
-1.6	0.106	6.6	0.118	20.5	0.050	41.0	0.047	61.5	0.054	82.0	0.025
-1.4	0.050	6.8	0.118	21.0	0.063	41.5	0.040	62.0	0.060	82.5	0.024
-1.2	0.087	7.0	0.117	21.5	0.077	42.0	0.032	62.5	0.063	83.0	0.024
-1.0	0.193	7.2	0.117	22.0	0.088	42.5	0.026	63.0	0.064	83.5	0.023
-0.8	0.316	7.4	0.118	22.5	0.086	43.0	0.026	63.5	0.062	84.0	0.021
-0.6	0.447	7.6	0.119	23.0	0.071	43.5	0.030	64.0	0.057	84.5	0.020
-0.4	0.577	7.8	0.121	23.5	0.050	44.0	0.033	64.5	0.046	85.0	0.018
-0.2	0.699	8.0	0.121	24.0	0.037	44.5	0.030	65.0	0.036	85.5	0.016
0.0	0.807	8.2	0.120	24.5	0.039	45.0	0.023	65.5	0.025	86.0	0.014
0.2	0.894	8.4	0.117	25.0	0.051	45.5	0.018	66.0	0.016	86.5	0.011
0.4	0.957	8.6	0.111	25.5	0.065	46.0	0.021	66.5	0.013	87.0	0.009
0.6	0.993	8.8	0.103	26.0	0.073	46.5	0.028	67.0	0.017	87.5	0.007
0.8	1.000	9.0	0.094	26.5	0.068	47.0	0.030	67.5	0.022	88.0	0.005
1.0	0.980	9.2	0.086	27.0	0.052	47.5	0.028	68.0	0.025	88.5	0.003
1.2	0.936	9.4	0.081	27.5	0.029	48.0	0.028	68.5	0.025	89.0	0.002
1.4	0.870	9.6	0.078	28.0	0.009	48.5	0.034	69.0	0.023	89.5	0.001
1.6	0.789	9.8	0.077	28.5	0.002	49.0	0.045	69.5	0.019	90.0	0.000
1.8	0.697	10.0	0.077	29.0	0.005	49.5	0.053	70.0	0.014		
2.0	0.601	10.2	0.076	29.5	0.017	50.0	0.056	70.5	0.008		
2.2	0.506	10.4	0.073	30.0	0.032	50.5	0.053	71.0	0.006		

Dielectric

Proposal Number	**DCA-10936**	Revision:	**2**
Date	**9-Jun-05**		
Call Letters	**KPXJ-DT**	Channel	**21**
Location	**Minden, LA**		
Customer			
Antenna Type	**TFU-30DSC-R S200**		

AZIMUTH PATTERN

Gain	**2.00**	**(3.01 dB)**	
Calculated / Measured	**Calculated**		
Frequency	**515.00 MHz**		
Drawing #	**TFU-S200**		



Dielectric

Proposal Number	**DCA-10936**	Revision:	**2**
Date	**9-Jun-05**		
Call Letters	**KPXJ-DT**	Channel	**21**
Location	**Minden, LA**		
Customer			
Antenna Type	**TFU-30DSC-R S200**		

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: **TFU-S200**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.311	45	0.735	90	0.896	135	1.000	180	0.896	225	0.735	270	0.311	315	0.417
1	0.320	46	0.740	91	0.900	136	1.000	181	0.892	226	0.730	271	0.303	316	0.416
2	0.330	47	0.744	92	0.904	137	1.000	182	0.889	227	0.725	272	0.296	317	0.416
3	0.339	48	0.749	93	0.908	138	0.999	183	0.885	228	0.719	273	0.289	318	0.414
4	0.350	49	0.753	94	0.911	139	0.999	184	0.881	229	0.714	274	0.283	319	0.413
5	0.361	50	0.757	95	0.915	140	0.998	185	0.877	230	0.708	275	0.278	320	0.411
6	0.372	51	0.761	96	0.919	141	0.998	186	0.873	231	0.702	276	0.274	321	0.408
7	0.383	52	0.765	97	0.922	142	0.997	187	0.870	232	0.695	277	0.270	322	0.405
8	0.395	53	0.769	98	0.926	143	0.996	188	0.866	233	0.689	278	0.268	323	0.402
9	0.406	54	0.772	99	0.930	144	0.995	189	0.862	234	0.682	279	0.266	324	0.398
10	0.418	55	0.776	100	0.933	145	0.994	190	0.859	235	0.675	280	0.267	325	0.394
11	0.430	56	0.779	101	0.937	146	0.993	191	0.855	236	0.667	281	0.267	326	0.390
12	0.442	57	0.783	102	0.940	147	0.992	192	0.851	237	0.660	282	0.268	327	0.385
13	0.454	58	0.786	103	0.943	148	0.990	193	0.848	238	0.652	283	0.270	328	0.380
14	0.466	59	0.789	104	0.947	149	0.989	194	0.844	239	0.643	284	0.274	329	0.374
15	0.478	60	0.792	105	0.950	150	0.987	195	0.841	240	0.635	285	0.277	330	0.368
16	0.489	61	0.795	106	0.953	151	0.985	196	0.837	241	0.626	286	0.282	331	0.363
17	0.501	62	0.799	107	0.956	152	0.983	197	0.834	242	0.617	287	0.286	332	0.356
18	0.513	63	0.802	108	0.959	153	0.981	198	0.831	243	0.608	288	0.292	333	0.350
19	0.524	64	0.805	109	0.962	154	0.979	199	0.827	244	0.598	289	0.298	334	0.343
20	0.535	65	0.808	110	0.964	155	0.977	200	0.824	245	0.588	290	0.304	335	0.337
21	0.546	66	0.811	111	0.967	156	0.975	201	0.821	246	0.578	291	0.310	336	0.330
22	0.557	67	0.814	112	0.970	157	0.972	202	0.818	247	0.568	292	0.317	337	0.323
23	0.568	68	0.818	113	0.972	158	0.970	203	0.814	248	0.557	293	0.323	338	0.317
24	0.578	69	0.821	114	0.975	159	0.967	204	0.811	249	0.546	294	0.330	339	0.310
25	0.588	70	0.824	115	0.977	160	0.964	205	0.808	250	0.535	295	0.337	340	0.304
26	0.598	71	0.827	116	0.979	161	0.962	206	0.805	251	0.524	296	0.343	341	0.298
27	0.608	72	0.831	117	0.981	162	0.959	207	0.802	252	0.513	297	0.350	342	0.292
28	0.617	73	0.834	118	0.983	163	0.956	208	0.799	253	0.501	298	0.356	343	0.286
29	0.626	74	0.837	119	0.985	164	0.953	209	0.795	254	0.489	299	0.363	344	0.282
30	0.635	75	0.841	120	0.987	165	0.950	210	0.792	255	0.478	300	0.368	345	0.277
31	0.643	76	0.844	121	0.989	166	0.947	211	0.789	256	0.466	301	0.374	346	0.274
32	0.652	77	0.848	122	0.990	167	0.943	212	0.786	257	0.454	302	0.380	347	0.270
33	0.660	78	0.851	123	0.992	168	0.940	213	0.783	258	0.442	303	0.385	348	0.268
34	0.667	79	0.855	124	0.993	169	0.937	214	0.779	259	0.430	304	0.390	349	0.267
35	0.675	80	0.859	125	0.994	170	0.933	215	0.776	260	0.418	305	0.394	350	0.267
36	0.682	81	0.862	126	0.995	171	0.930	216	0.772	261	0.406	306	0.398	351	0.266
37	0.689	82	0.866	127	0.996	172	0.926	217	0.769	262	0.395	307	0.402	352	0.268
38	0.695	83	0.870	128	0.997	173	0.922	218	0.765	263	0.383	308	0.405	353	0.270
39	0.702	84	0.873	129	0.998	174	0.919	219	0.761	264	0.372	309	0.408	354	0.274
40	0.708	85	0.877	130	0.998	175	0.915	220	0.757	265	0.361	310	0.411	355	0.278
41	0.714	86	0.881	131	0.999	176	0.911	221	0.753	266	0.350	311	0.413	356	0.283
42	0.719	87	0.885	132	0.999	177	0.908	222	0.749	267	0.339	312	0.414	357	0.289
43	0.725	88	0.889	133	1.000	178	0.904	223	0.744	268	0.330	313	0.416	358	0.296
44	0.730	89	0.892	134	1.000	179	0.900	224	0.740	269	0.320	314	0.416	359	0.303